Listing of the Claims:

- 1. (Original) A biocompatible polymer composition, suitable for *in vivo* vessel repair, comprising a matrix pre-polymer, a filler and a curing agent, wherein said composition has a viscosity of 2 000 to 12 000 cSt at 25 °C and wherein said biocompatible polymer composition is curable in the presence of a curing catalyst at 37 °C to form a cured material with an elongation until rupture of at least 5 % and an elastic modulus of at least 1 MPa.
- 2. (Original) Composition according to claim 1, wherein the viscosity of the biocompatible polymer composition is in the range of 3 000 to 10 000 cSt, preferably of 4 000 to 8 000 cSt.
- 3. (Previously Presented) Composition according to claim 1r, wherein said biocompatible polymer composition is curable in the presence of a curing catalyst at 37° C to form a cured material with an elongation until rupture of at least 10 %, preferably at least 25 %.
- 4. (Cancelled)
- 5. (Previously Presented) Composition according to claim 1, wherein the filler is a hydrophobic filler.
- 6. (Cancelled)
- 7. (Previously Presented) Composition according to claim 1, wherein the biocompatible polymer composition comprises a curing-inhibitor.

Claims 8-15 (Cancelled)

16. (Previously Presented) Kit of parts suitable for use in an *in vivo* vessel repair, comprising a biocompatible polymer composition according to claim 1, and a curing-catalyst composition.

- 17. (Previously Presented) Kit according to claim 1, wherein the curing catalyst composition comprises at least one component selected from the group consisting of matrix pre-polymers, fillers and contrast agents.
- 18. (Previously Presented) Kit according to claim 1, wherein the viscosity of the curing catalyst composition is at most 1 500 cSt higher or lower than the viscosity of the biocompatible polymer composition.
- 19. (Previously Presented) Kit according to claim 1, wherein the biocompatible polymer composition mixed with the curing catalyst composition, has a curing time of 5 min or less, preferably of less than 3 min.
- 20. (Previously Presented) Use of a composition according to claim 1, in the manufacture of a physiologically acceptable composition for the *in vivo* repair of an aneurysm, preferably an aortic aneurysm.
- 21. (Previously Presented) Use of a composition according to claim 1, in the manufacture of a physiologically acceptable composition for prophylactic treatment of a bone, preferably a hip or a collarbone.
- 22. (Previously Presented) Use of a composition according to claim 1, in the manufacture of a physiologically acceptable composition for securing a stent or stent-graft in an artery.
- 23. (Previously Presented) Cured material, obtainable by curing a composition according to claim 1.